UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/770,002	01/25/2001	Peter Lloyd Amlot	4-30583A	5207

1095 7590 02/01/2008

NOVARTIS
CORPORATE INTELLECTUAL PROPERTY
ONE HEALTH PLAZA 104/3
EAST HANOVER, NJ 07936-1080

EXAMINER	
EWOLDT, GERALD R	
ART UNIT	PAPER NUMBER
1644	

MAIL DATE	DELIVERY MODE
02/01/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/770,002	AMLOT ET AL.	
	Examiner	Art Unit	
	G. R. Ewoldt, Ph.D.	1644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on *02 November 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *4,5 and 8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *4,5 and 8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. A request for continued examination (RCE) under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed 11/02/07 in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's amendment and remarks filed 11/02/07 have been entered.

2. Claims 4, 5, and 8 are pending and being acted upon.

3. In view of Applicant's amendment the previous rejection under the first paragraph of 35 U.S.C. 112 for an inadequate written description has been withdrawn.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103 (c)and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 4, 5, and 8 stand rejected under 35 U.S.C. 103(a) as being unpatentable over WO 89/09622 (IDS, of record) in view of Kovarik et al. (1997, of record).

As set forth previously, WO 89/09622 teaches a method of treating rheumatoid arthritis (RA) comprising administering an effective amount of a CD25 binding molecule. The reference further teaches the coadministration of a further substance effective in the treatment of RA (e.g., methotrexate) (see particularly page 12).

The reference differs from the claimed invention in that it does not teach the administration of a CD25 binding molecule comprising a CDR1, CDR2, and CDR3 having the amino acid sequences Arg-Tyr-Trp-Met-His, Ala-Ile-Tyr-Pro-Gly-Asn-Ser-Asp-Thr-Ser-Tyr-Asn-Gln-Lys-Phe-Glu-Gly, and Asp-Tyr-Gly-Tyr-Tyr-Phe-Asp-Phe, respectively, nor direct equivalents [now basiliximab].

Kovarik et al. teaches a CD25 binding molecule basiliximab (see particularly page 1702, column 1, *Study treatments*). The reference also teaches that serum concentrations of basiliximab sufficient to saturate IL-2 receptors were achievable (see particularly *Pharmacokinetics*, Tables 1 and 2)

It would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to perform a method of treating RA comprising administering an effective amount of a CD25 binding molecule, with or without coadministration of a further substance effective in the treatment of RA, as taught by WO 89/09622, employing basiliximab, as taught by Kovarik et al. One of ordinary skill in the art at the time the invention was made would have been motivated to use basiliximab as the CD25 binding agent because basiliximab was a well-known CD25 binding agent and it was known that serum concentrations of basiliximab sufficient to saturate IL-2 receptors were achievable, as taught by Kovarik et al. Note that the saturation of IL-2 receptors is the mechanism by which the treatment of the instant claims would be expected to functions.

It is the Examiner's position that if the '622 document taught that the specific antibodies recited in amended independent claim 4 (basiliximab) could be utilized to treat rheumatoid arthritis, the instant rejection would have been under 102(b). Because the reference did not teach the use of the single antibody of the instant specification (basiliximab) a secondary reference was required and the rejection was made under 103 for obviousness. The reference does teach that "The present invention provides novel compositions useful in the treatment of T-cell mediated human disorders, the compositions containing a chimeric antibody specifically capable of binding to human IL-2 receptors, such as at the epitope bound by the anti-Tac monoclonal antibody. The IL-2 chimeric antibody can have two pairs of light chain/heavy chain complexes, wherein at least one pair has chains comprising mouse variable regions joined with human constant region segments, with or without naturally-associated J and D segments" (page 3) and further teaches RA as one such disease. In other words, the reference teaches the use of a chimeric anti-IL2 receptor antibody for the treatment of RA. Kovarik et al. teaches the chimeric anti-IL2 receptor antibody basiliximab. Accordingly the combined references need comprise nothing more than the substitution of obvious equivalents for a proper obviousness type rejection. However, the Kovarik et al. reference teaches more. It also teaches that basiliximab can achieve IL-2 receptor saturation and that the antibody is well tolerated, thus basiliximab could be considered to be not just an equivalent of the antibody of the '622 document, but a *preferred* substitution for said antibody.

Applicant's arguments filed 11/02/07 have been fully considered but they are not persuasive. Applicant again attempts to discredit the primary reference by arguing that it contains no *in vivo* data. Applicant alleges that immunosuppressive factors are not predictable.

Applicant's argument again seems incredible given the fact that the instant specification itself discloses no *in vivo* data. However, the ordinarily skilled artisan would have had every expectation of success in treating an autoimmune disease with an immunosuppressive mAb (basiliximab) *demonstrated* to have *in vivo* immunosuppressive efficacy. Regarding Applicant's allegations pertaining to immunosuppressive factors, said allegations provide no support for the claimed method absent data to support them.

Applicant argues that the examples of the specification are not prophetic.

Applicant's argument is noted. Applicant is advised that had the specification been relied upon to establish the enablement of the claimed method, the single, unsupported allegation that, "Patients receiving basiliximab show an amelioration of the symptoms as compared to patients receiving placebo" would not have been found to be enabling for the claimed method.

Applicant argues that Koravik [sic] et al. provides no indication or suggestion that basiliximab would be suitable for treating RA.

As set forth in the body of the rejection, the substitution of obvious equivalents, i.e., the substitution of one anti-CD25 antibody for another, would have been obvious and would have provided the ordinarily skilled artisan every expectation of success.

7. No claim is allowed.

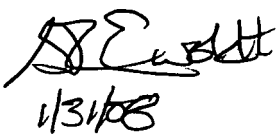
8. All claims are drawn to the same invention claimed in the parent application prior to the filing of this RCE under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the

filing under 37 CFR 1.114. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Gerald Ewoldt whose telephone number is (571) 272-0843. The examiner can normally be reached Monday through Thursday from 7:30 am to 5:30 pm. A message may be left on the examiner's voice mail service. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen O'Hara, Ph.D. can be reached on (571) 272-0878.

10. **Please Note**: Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197.



1/31/08

G.R. Ewoldt, Ph.D.
Primary Examiner
Technology Center 1600